The Internet: Brainchild of the DoD

Forrest Brown Managing Editor



A few years back the Department of Defense (DoD) allegedly paid over \$400 for a hammer. The cost of a toilet seat for the space shuttle was said to be

over \$1,000. Just before the Gulf War in 1991, a group of U.S. congressmen claimed we had "gold plated" our military by spending millions of taxpayer dollars unwisely. Soon after that, many watchdog groups began to keep a closer eye on how the DoD spent its dollars.

Until recently, I, too, was concerned that maybe the taxpayer was not getting a fair deal, since I am also a taxpayer. Then, while I was surfing the Web one day, I ran across an article on the history of the Internet. I was interested to learn that over 30 years ago, the RAND Corporation was commissioned by the DoD to come up with a way for the U.S. government to communicate after a nuclear war attack. The article states that "any central authority, any network central citadel, would be an obvious and immediate target for an enemy missile" and "the center of the network would be the very first place to go." Consequently, an Internet was developed to "have no central authority"; "all the nodes in the network would be equal in status to all other nodes, each node with its own authority to originate, pass, and receive messages" (http://w3.aces.uiuc.edu/AIM/scale/nethistory.html). This, in essence, was the birth of what is now one of the fastest-growing technologies in the world.

Today, much of our daily work involves the Internet. Statistics from the Graphics, Visualization & Usability Center's eighth World Wide Web user survey (http://www.gvu.gatech.edu/ user_surveys/survey-1997-10) indicate that 85 percent of the respondents use the Web daily; the largest number of respondents use it one to four times daily (45 percent), whereas 41 percent use it more frequently. Also, daily Web access by expert users is considerably higher (94 percent) than that of novice users (78 percent). Of 2,921 people responding, 38 percent spend up to five hours a week using their browsers, while 35 percent spend six to 10 hours a week on line (http://www.ocean.ic. net/ftp/doc/nethist.html). The data also strongly indicate that Internet use is continuing to rise drastically.

Where does the Internet go from here? Recently, in Federal Computer Week, Heather Harreld reported that the Next Generation Internet Program, which is currently being discussed before the U.S. Senate, "has a goal of increasing the present speed of the Internet by as much as 1,000 times." Just imagine what we can do then! Greg Meyer's article on one of the new Internet technologies, XML (page 6), illustrates that this new format soon will support intelligent information management on the Internet, improving on the current HyperText Transfer Markup Language and Standard Generalized Markup Language formats. On the horizon for Intranets (implementation of Internet technologies within an organization) is Java database connectivity, interactive forms, and collaborative design and reviews with off-site customers (see "Developing an Intranet for a Small Unit," p. 3).

In light of these developments, we can conclude that good and useful things have come from our defense and military efforts (*Crosstalk* is one example) and that we can undoubtedly continue to receive benefits beyond national security from our military organization. ◆



Letter to the Editor

GSAM and Crosstalk Provide Needed Resources

Your Guidelines for Successful Acquisition and Management of Software-Intensive Systems (GSAM), Version 2.0, June 1996 has been immensely beneficial in carrying out various assignments. It is a rich encyclopedic resource, which is supple-

mented by your monthly *Crosstalk*. Together they form a valuable single source of reference for almost everything one needs on various phases of systems development lifecycle.

Adepu Bikshapathi EER Systems, Inc. Readers can comment on articles printed in Crosstalk. Please limit your comments to under 250 words. Include your name, address, and telephone number. We will withhold your name if requested. Your letter may be edited for grammar, content, and space. Please send correspondence to Crosstalk, OO-ALC/TISE, 7278 Fourth Street, Hill AFB, UT 84056-5205 or E-mail to senior_editor@stsc1.hill.af.mil.